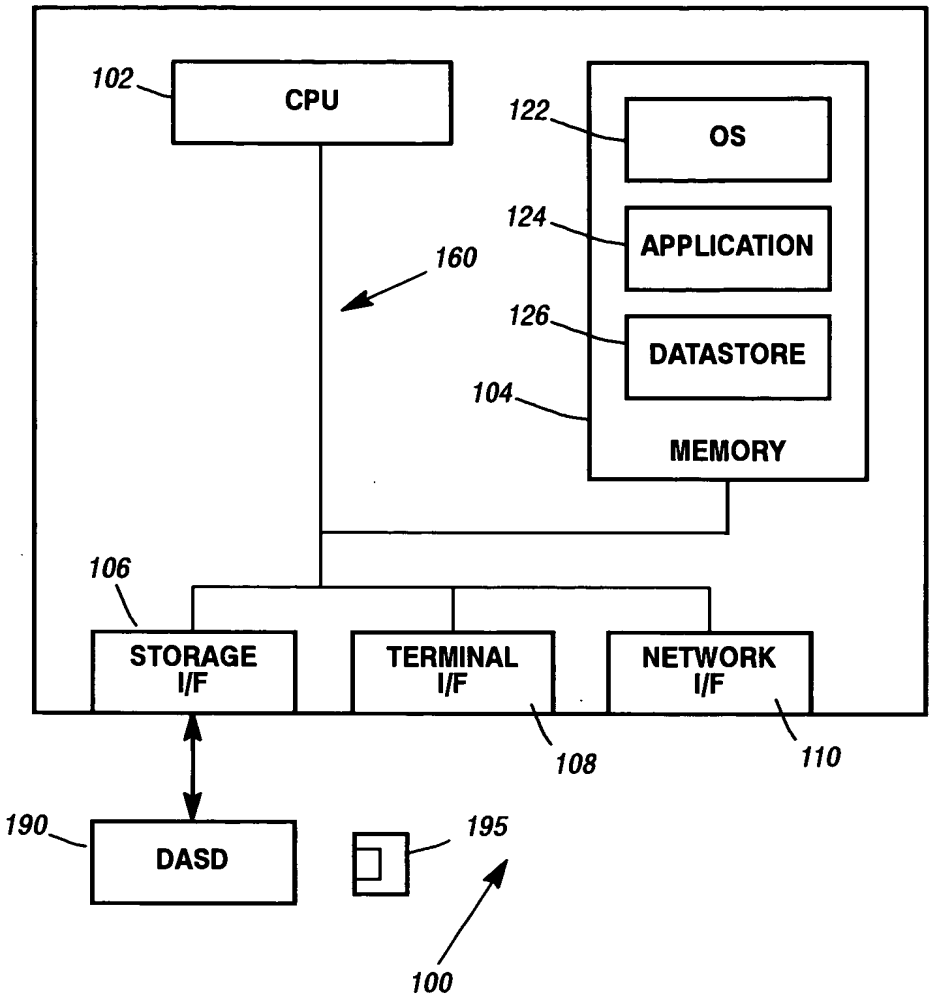

102
CPU
122
OS
124
APPLICATION
160
126
DATASTORE
104
MEMORY
106
STORAGE I/F
TERMINAL I/F
NETWORK I/F
108
110
190
DASD
195
100

Figure 1

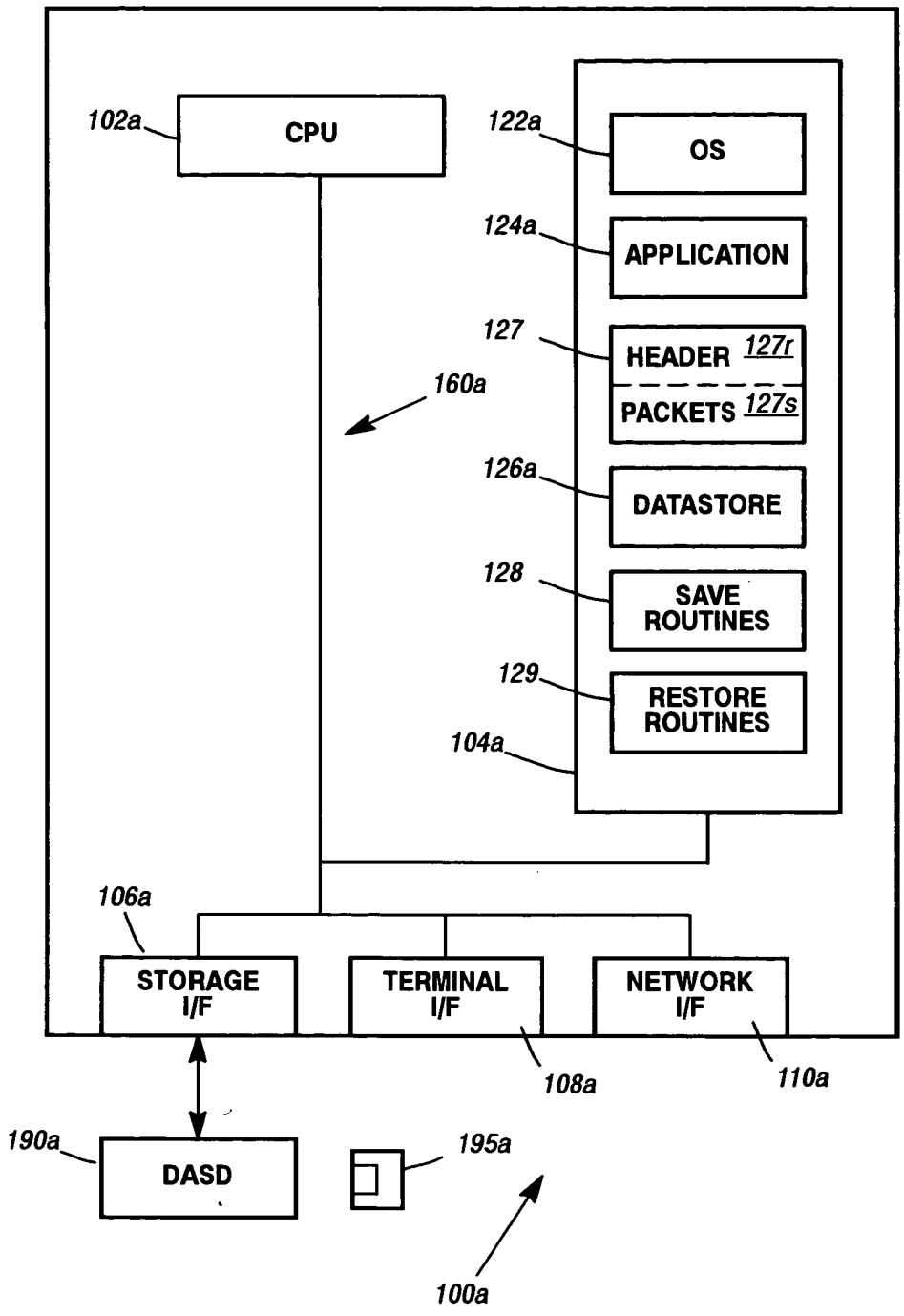

102a
CPU
122a
OS
124a
APPLICATION
127
HEADER 127r
PACKETS 127s
160a
126a
DATASTORE
128
SAVE ROUTINES
129
RESTORE ROUTINES
104a
106a
STORAGE I/F
TERMINAL I/F
NETWORK I/F
108a
110a
190a
DASD
195a
100a

Figure 1A

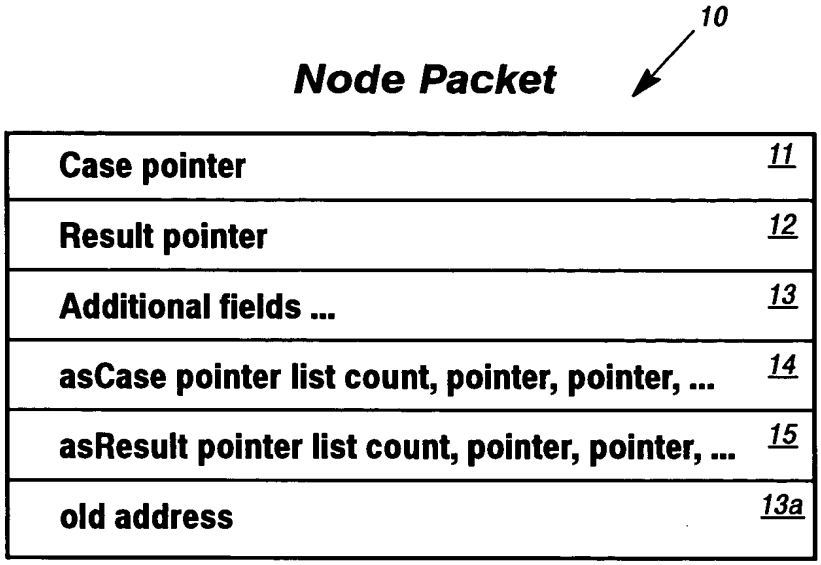

10
Node Packet
Case pointer
11
Result pointer
12
Additional fields ...
13
asCase pointer list count, pointer, pointer, ...
14
asResult pointer list count, pointer, pointer, ...
15
old address
13a

Figure 2

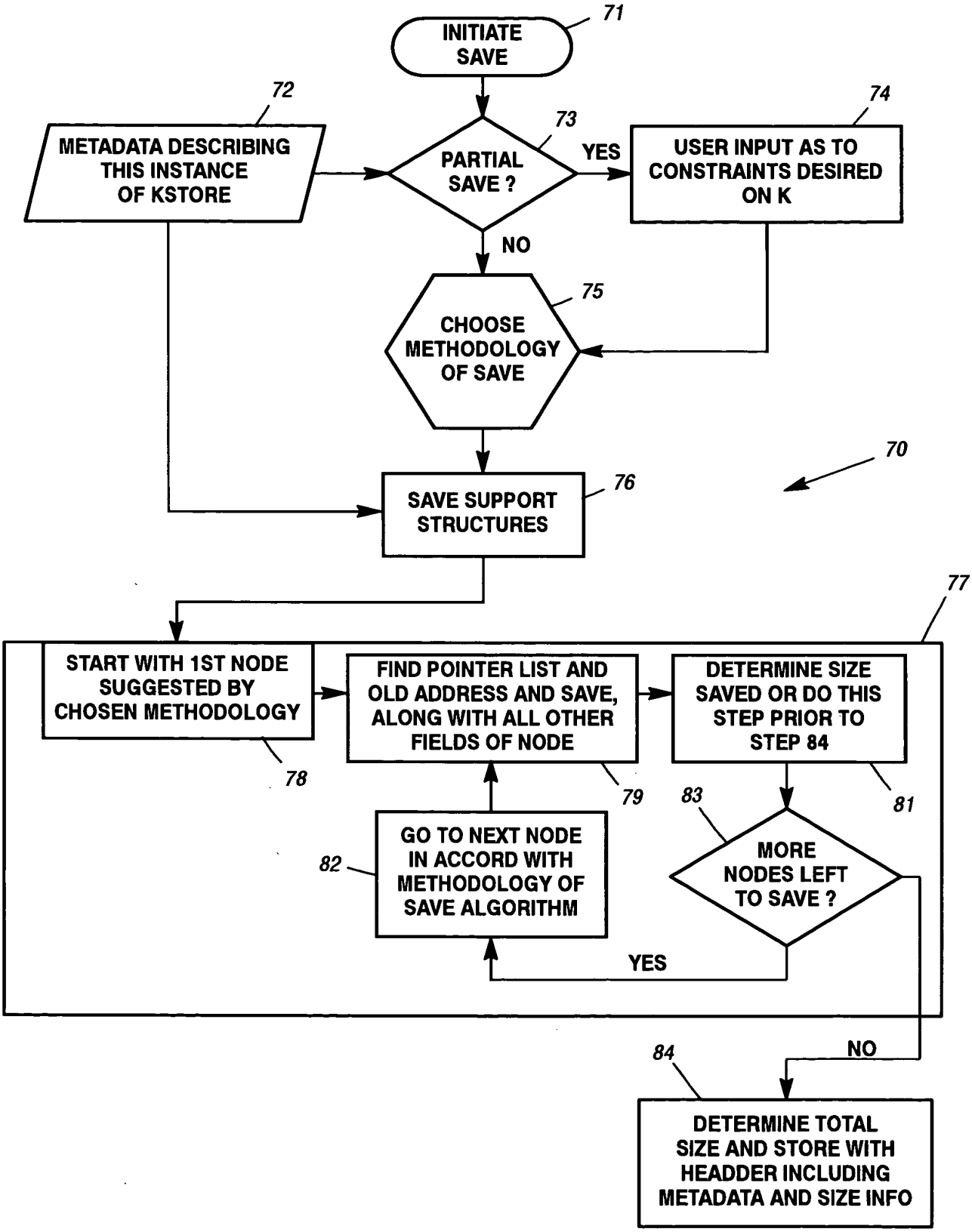

INITIATE SAVE
71
METADATA DESCRIBING THIS INSTANCE OF KSTORE
72
PARTIAL SAVE ?
73
YES
USER INPUT AS TO CONSTRAINTS DESIRED ON K
74
NO
CHOOSE METHODOLOGY OF SAVE
75
70
SAVE SUPPORT STRUCTURES
76
77
START WITH 1ST NODE SUGGESTED BY CHOSEN METHODOLOGY
78
FIND POINTER LIST AND OLD ADDRESS AND SAVE, ALONG WITH ALL OTHER FIELDS OF NODE
79
DETERMINE SIZE SAVED OR DO THIS STEP PRIOR TO STEP 84
81
83
MORE NODES LEFT TO SAVE ?
GO TO NEXT NODE IN ACCORD WITH METHODOLOGY OF SAVE ALGORITHM
82
YES
NO
84
DETERMINE TOTAL SIZE AND STORE WITH HEADDER INCLUDING METADATA AND SIZE INFO

Figure 3

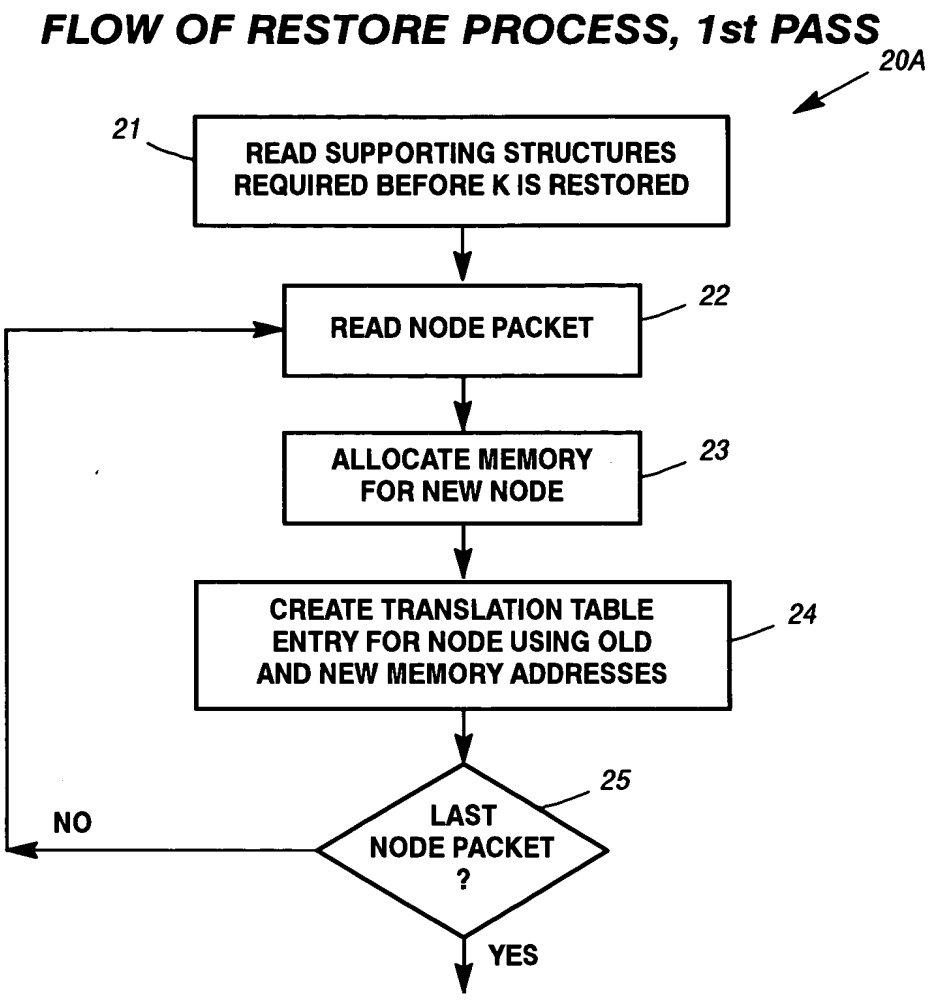

FLOW OF RESTORE PROCESS, 1st PASS
20A
21
READ SUPPORTING STRUCTURES REQUIRED BEFORE K IS RESTORED
22
READ NODE PACKET
23
ALLOCATE MEMORY FOR NEW NODE
24
CREATE TRANSLATION TABLE ENTRY FOR NODE USING OLD AND NEW MEMORY ADDRESSES
25
LAST NODE PACKET ?
NO
YES

Figure 4

FLOW OF RESTORE PROCESS, 2nd PASS

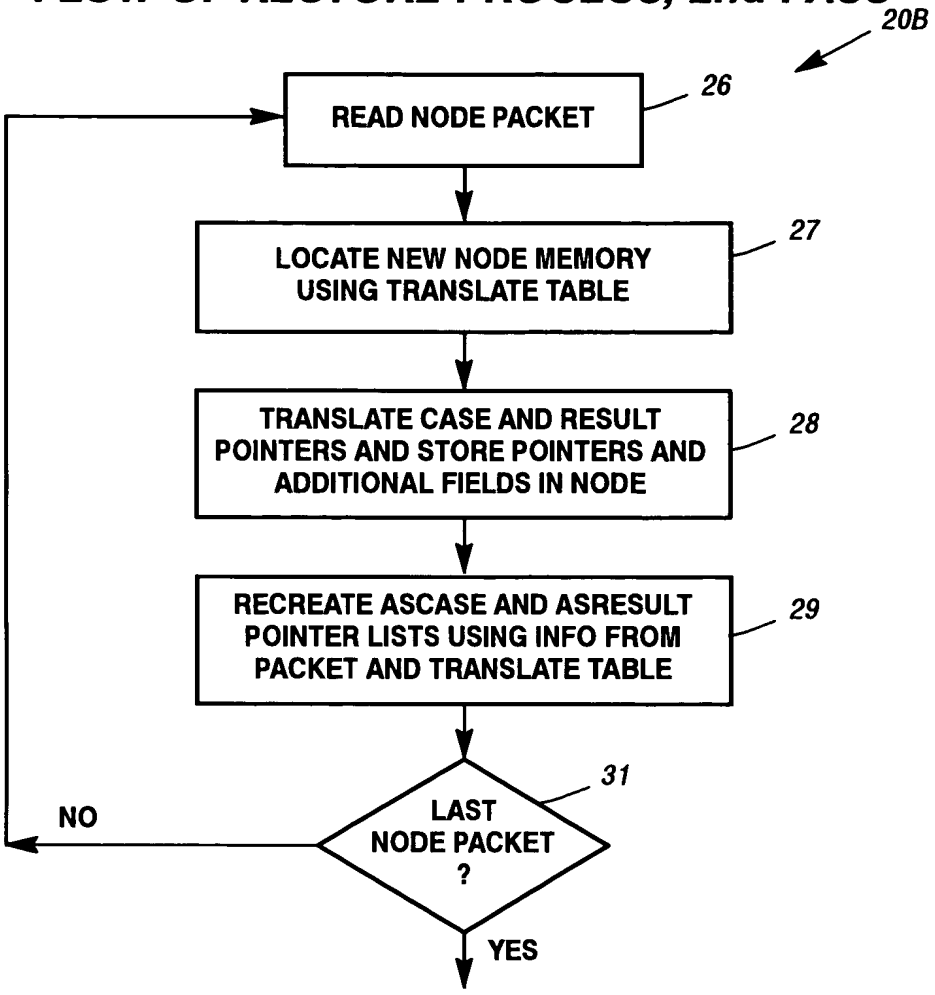


Figure 5

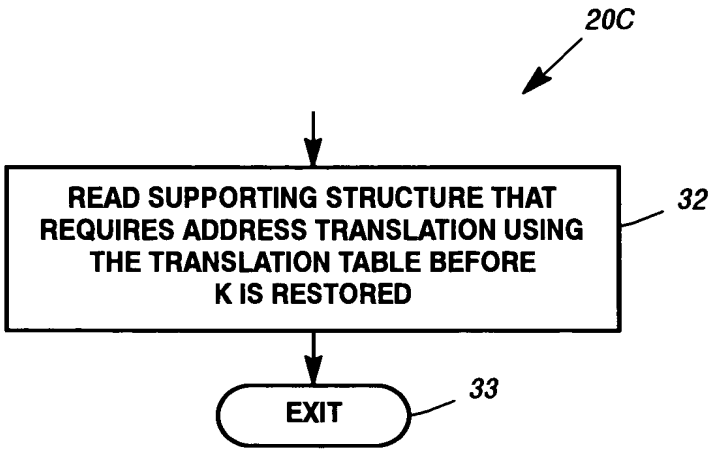

20C
READ SUPPORTING STRUCTURE THAT REQUIRES ADDRESS TRANSLATION USING THE TRANSLATION TABLE BEFORE K IS RESTORED
32
EXIT
33

Figure 6

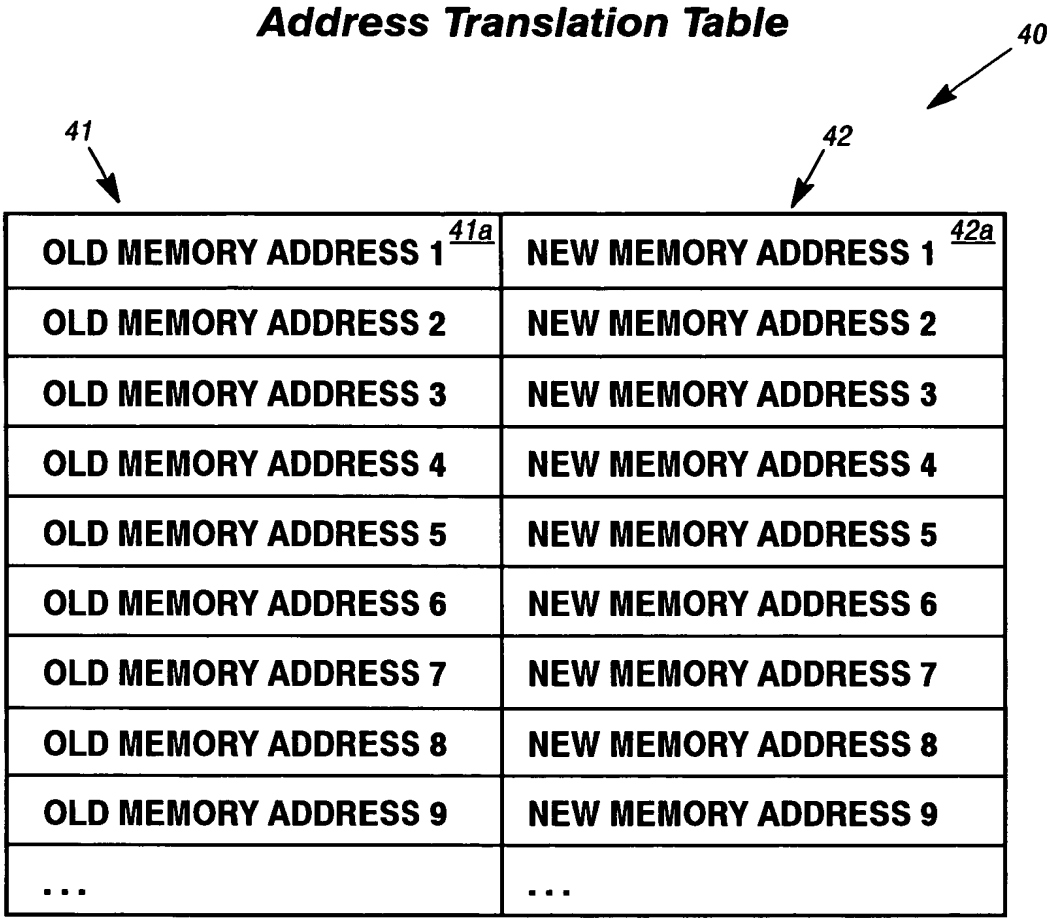

Address Translation Table
40
41
42
OLD MEMORY ADDRESS 1
41a
NEW MEMORY ADDRESS 1
42a
OLD MEMORY ADDRESS 2
NEW MEMORY ADDRESS 2
OLD MEMORY ADDRESS 3
NEW MEMORY ADDRESS 3
OLD MEMORY ADDRESS 4
NEW MEMORY ADDRESS 4
OLD MEMORY ADDRESS 5
NEW MEMORY ADDRESS 5
OLD MEMORY ADDRESS 6
NEW MEMORY ADDRESS 6
OLD MEMORY ADDRESS 7
NEW MEMORY ADDRESS 7
OLD MEMORY ADDRESS 8
NEW MEMORY ADDRESS 8
OLD MEMORY ADDRESS 9
NEW MEMORY ADDRESS 9
...
...

Figure 7

Nodes Including Additional Fields

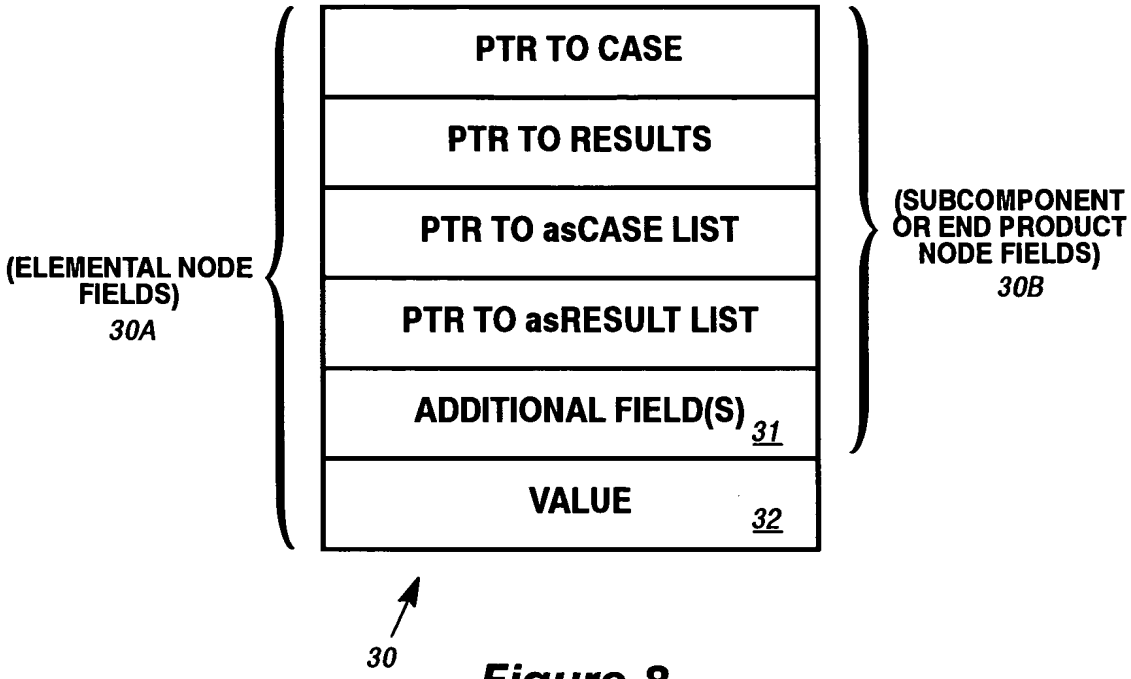


Figure 8

Minimal Kstore Structure

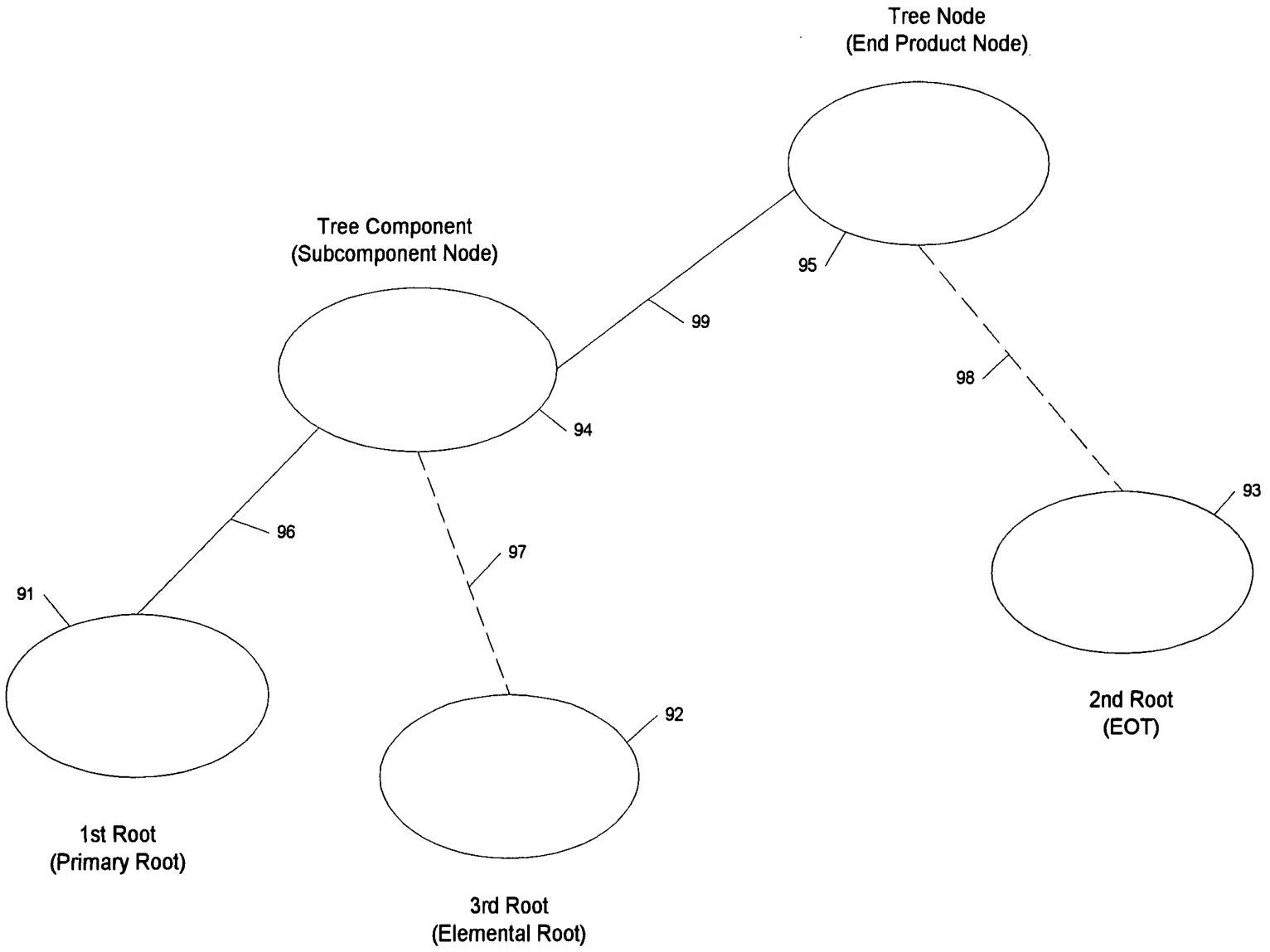


Figure 9

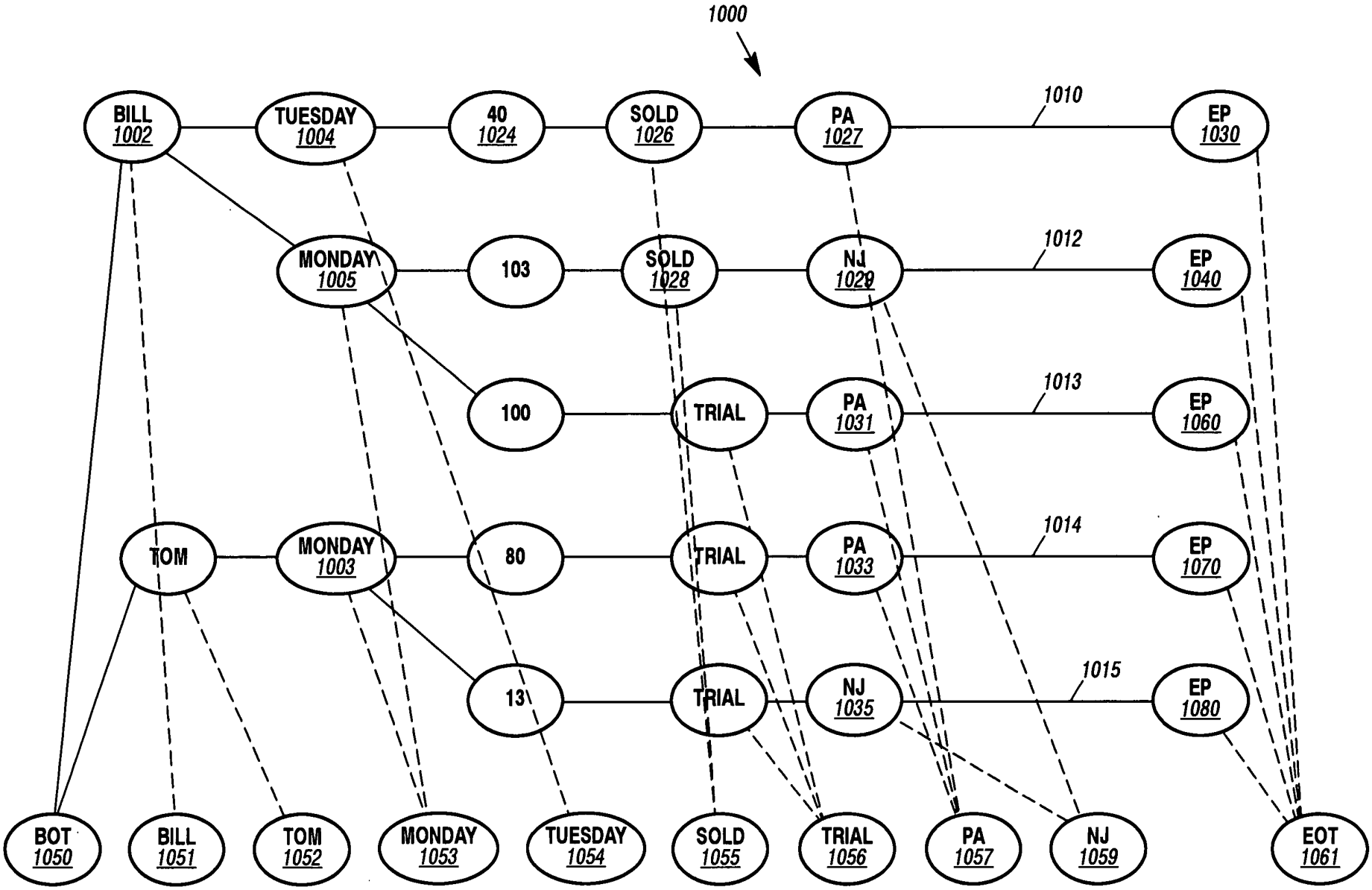

1000
BILL 1002
TUESDAY 1004
40 1024
SOLD 1026
PA 1027
1010
EP 1030
MONDAY 1005
103
SOLD 1028
NJ 1029
1012
EP 1040
100
TRIAL
PA 1031
1013
EP 1060
TOM
MONDAY 1003
80
TRIAL
PA 1033
1014
EP 1070
13
TRIAL
NJ 1035
1015
EP 1080
BOT 1050
BILL 1051
TOM 1052
MONDAY 1053
TUESDAY 1054
SOLD 1055
TRIAL 1056
PA 1057
NJ 1059
EOT 1061

Figure 10